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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I 5 POST OFFICE SQUARE, SUITE 100 BOSTON, MASSACHUSETTS 02109-3912

# CERTIFIED MAIL - RETURN RECEIPT REQUESTED OCT 0 2 2019

Michael E. Schrier, Director of Design & STEM Projects University of Connecticut University Planning, Design, & Construction 31 LeDoyt Road, Unit 3038 Storrs, Connecticut 06269

Re: PCB Alternative Decontamination, Cleanup and Disposal Approval under 40 CFR §§ 761.61(a) and (c) and § 761.79(h)
University of Connecticut - Edward V. Gant Science Complex Phase 2
Storrs, Connecticut

Dear Mr. Schrier:

This is in response to the University of Connecticut (UConn) Notification<sup>1</sup> for approval of a proposed plan to address PCB contamination located in the building known as the Edward V. Gant Science Complex (the Site), 2152 Hillside Road, Storrs, Connecticut. PCB-containing non-liquid products that are not authorized for use under 40 CFR § 761.30 and thus are prohibited under 761.20(a) are located at the Site. Specifically, PCBs have been found in caulk, glazing and paint at greater than or equal to ("\ge ") 50 parts per million ("ppm"). Building materials and exterior surface ground covers located adjacent to the caulk, glazing, and paints were found to contain PCBs at greater than (">") 1 ppm.

In its Notification, UConn has proposed the following PCB remediation plan:

Remove PCB bulk product waste as shown in Phase 2 Notification dated May 8, 2019 with adjacent non-structural CMU and brick walls and concrete ceilings at the shaft penetrations, entire Type 3 and 4 window components, cove base, foam paneling, door frames, doors, and brick at 12 inches from the door frame, gypsum board walls, and black paint on stair systems in stairways B and C, and similar materials previously identified to contain PCBs in the Phase 1 area, and dispose in accordance with 40 CFR § 761.62(b)

<sup>&</sup>lt;sup>1</sup> The Notification was prepared by Tighe & Bond, on behalf of UConn to satisfy the requirements under 40 CFR §§ 761.61(a) and (c) and § 761.79(h). Information was submitted dated May 8, 2019 (Self-Implementing Cleanup & Disposal Plan & Risk-based Disposal Plan Modification-Phase 2); August 8, 2019 (Revised Self-Implementing Cleanup & Disposal Plan & Risk-based Disposal Plan pages and Response to EPA comments); August 19, 2019 (email response to EPA questions on concerning missing corrected pages); and September 25, 2019 (email response to question concerning black stairway paint). These submittals shall be referred to as the "Notification".

- o Remove *PCB remediation waste* (i.e., soil section with dimensions 15 feet (ft) x 15 ft south of west entrance, concrete roof pavers below Type 2 exterior window caulk at the SW corridor, and portions of plaster soffit in stairwells to accommodate utility lines (250 sq ft) along with floor tile and mastic to a distance of 2 ft on either side of the caulk in rooms P026A, P026B, and P027 and dispose in accordance with § 761.61(a)(5)(i)(B)(2)(iii)
- O Collect PCB samples from remaining *porous surfaces* (i.e., structural brick wall and roof pavers) and soil in accordance with 40 CFR Part 761 Subpart O to confirm the less than or equal to (≤) 1 ppm PCB cleanup standard has been met
- Encapsulate PCB-contaminated structural porous surfaces with an epoxy coating (i.e., 6 inches from the interior expansion joints and interior Type 3 window joints) and with a latex paint (i.e., concrete ceilings and beams, and walls, columns, and headers associated with the white paint)
- Collect PCB samples of the encapsulated porous surfaces to confirm the effectiveness of the encapsulation procedure

UConn has determined that certain paints, window gaskets, glue daubs, and tile mastic (except for mastic identified as *PCB remediation waste*) used throughout the Phase 2 areas, which have PCB concentrations at < 50 ppm meet the criteria for an *Excluded PCB Product* under § 761.3. Under the PCB regulations, there is no requirement to remove *Excluded PCB Products* or to decontaminate surfaces that are in contact with the < 50 ppm PCB-contaminated building products. However, as indicated in the Notification, these materials will be removed and disposed of under the Connecticut Department of Energy and Environmental Protection (CTDEEP) Regulations. Please be aware that should UConn determine that any of these products do not meet the criteria for classification as *Excluded PCB Products*, the cleanup and disposal requirements under 40 CFR Part 761 shall apply.

Based on its review of the information provided in the Notification pertaining to encapsulation of greater than (>) 1 ppm PCB-contaminated *porous surfaces* that meet the definition of a *PCB* remediation waste, EPA has determined that the proposed risk-based disposal plan is acceptable and that the PCBs remaining at the Site will not pose an unreasonable risk of injury to health or the environment provided encapsulants are maintained. EPA applies this no unreasonable risk standard in accordance with the PCB regulations at 40 CFR § 761.61(c) and the Toxic Substances Control Act, at 15 USC § 2605(e).

UConn may proceed with its project in accordance with 40 CFR §§ 761.61(a) and (c); § 761.79(h); its Notification; and, this Approval, subject to the conditions of Attachment 1. EPA is reserving its rights to require additional investigation or mitigation measures should EPA determine that long-term requirements are not being implemented and/or the results of the long-term monitoring indicate that PCBs at the Site pose an unreasonable risk of injury to the building users.

This Approval addresses only the cleanup, decontamination, and disposal of *PCB remediation* waste associated with the Phase 2 renovation project. The Approval does not address *Excluded PCB Products* or Phase 3 renovation areas.

EPA encourages the compliance with greener cleanup practices for all cleanup projects and recommends adherence to the ASTM Standard Guide to Greener Cleanups E2893-16 (Guide) for work conducted under this Approval and the Notification. Greener cleanups is the practice of integrating options that minimize the environmental impacts of cleanup actions in order to incorporate practices that maximize environmental and human benefit. Please see Section 6 of the Guide for the Best Management Practices (BMP) Process published May 2016 (See <a href="https://www.astm.org/Standards/E2893.htm">www.astm.org/Standards/E2893.htm</a> for additional information). EPA encourages you to review the Guide and implement any practices that are feasible. If implemented, the PCB Completion Report (see Attachment 1, Condition 32) should include a section on BMP Documentation, as described in Section 6.6.5 of the Guide.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (LCRD07-2) United States Environmental Protection Agency 5 Post Office Square, Suite 100 Boston, Massachusetts 02109-3912 Telephone: (617) 918-1527 Tisa.Kimberly@epa.gov

EPA shall consider the work authorized under this Approval complete only when it has received documents evidencing construction of the physical controls at the Site (e.g., encapsulation, etc.), adoption of the deed restriction, acceptable post-abatement indoor air and surface wipe PCB concentrations, and establishment of a long-term maintenance and monitoring plan. EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

Nancy Barmakian, Acting Director

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Land, Chemicals and Redevelopment Division

Attachment 1 – PCB Approval Conditions

cc James T. Olsen, Tighe & Bond Gary Trombly, CTDEEP File

#### **ATTACHMENT 1:**

PCB ALTERNATIVE DECONTAMINATION, CLEANUP AND DISPOSAL APPROVAL CONDITIONS
EDWARD V. GANT SCIENCE COMPLEX-PHASE 2
2152 HILLSIDE ROAD
STORRS, CONNECTICUT

#### **GENERAL CONDITIONS**

- 1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB remediation waste* and *PCB bulk product waste* identified in the Notification that shall be addressed during the Phase 2 renovation, specifically, the West Wing and the remainder of the Southwest Connector, hereinafter "the Site".
  - a. In the event that the University of Connecticut (UConn), identifies other PCB-contaminated wastes subject to cleanup and disposal under the PCB regulations, UConn will be required to notify EPA and clean up the PCB-contaminated wastes in accordance with 40 CFR Part 761.
  - b. The University of Connecticut (UConn) may submit a separate plan to address the PCBs identified in these future phases or may request that EPA consider a modification to the Notification to incorporate cleanup of such PCBs under this Approval in accordance with Condition 23.
- 2. UConn shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
- 3. In the event that the plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
- 4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
- 5. UConn must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, UConn shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.

- 6. UConn is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time UConn has or receives information indicating that UConn or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
- 7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by UConn are authorized to conduct the activities set forth in the Notification. UConn is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.
- 8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release UConn from compliance with any applicable requirements of federal, state or local law; or 3) release UConn from liability for, or otherwise resolve any violations of federal, state or local law.
- 9. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

# NOTIFICATION AND CERTIFICATION CONDITIONS

- This Approval may be revoked if the EPA does not receive written notification from UConn of its acceptance of the conditions of this Approval within 10 business days of receipt.
- 11. UConn shall submit the following information to EPA:
  - a certification signed by its selected abatement/demolition contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
  - b. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval.

# CLEANUP, DECONTAMINATION AND DISPOSAL CONDITIONS

- 12. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.
- 13. All visible greater than or equal to (≥) 50 parts per million (ppm) PCB-containing caulk, glazing, paint and associated building substrates (e.g., bricks) shall be removed and/or cleaned as described in the Notification. The decontamination standard for porous surfaces to remain shall be less than or equal to (≤) 1 part per million (ppm) or alternatively, these porous surfaces shall be encapsulated as described in the Notification with post-encapsulation sampling to confirm the efficacy of the encapsulation process (see Condition 15).
  - a. Porous surfaces samples shall be collected on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Sampling for porous surfaces shall be conducted in accordance with the EPA Region 1 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011, at a maximum depth interval of 0.5 inches. Verification samples shall be collected at the frequency specified in 40 CFR Part 761 Subpart O.
  - b. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q. In the event dual column confirmation is used for PCB analysis, PCB analytical results for both columns shall be reported or alternatively, the highest PCB analytical result shall be reported.
- 14. The cleanup level for *PCB remediation waste* (i.e., soil and concrete pavers) remaining at the Site shall be  $\leq 1$  ppm.
  - a. Verification soil samples shall be collected on a bulk basis (i.e., mg/kg).
     Samples shall be collected in accordance with 40 CFR Part 761 Subpart O.
     Samples shall be collected from both excavation bottoms and sidewalls.
  - b. Porous surfaces (i.e., concrete pavers) samples shall be collected on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Sampling for porous surfaces shall be conducted in accordance with the EPA Region 1 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011, at a maximum depth interval of 0.5 inches. Verification samples shall be collected at the frequency specified in 40 CFR Part 761 Subpart O.

- c. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q. In the event dual column confirmation is used for PCB analysis, PCB analytical results for both columns shall be reported or alternatively, the highest PCB analytical result shall be reported.
- 15. For encapsulated PCB-contaminated porous surfaces, the following shall apply:
  - a. Wipe sampling of encapsulated *porous surfaces* shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e., μg/100 cm²). Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
  - b. In the event that the PCB concentration of any wipe sample is greater than (>)  $1 \mu g/100 \text{ cm}^2$ , and if this standard cannot be achieved with the application of additional encapsulant, UConn shall contact EPA for further discussion and direction on alternatives.
- 16. UConn shall conduct post-abatement indoor surface sampling and indoor air sampling following completion of the Phase 2 PCB work, including encapsulation activities:
  - a. Wipe sampling of non-encapsulated indoor surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e.,  $\mu g/100 \text{ cm}^2$ ). Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q. The laboratory reporting limit shall be  $\leq 1 \mu g/100 \text{ cm}^2$ .
  - b. Indoor air sampling shall be conducted in accordance with EPA Method TO-10A or EPA Method TO-4A. Sufficient sample volumes shall be collected to provide a laboratory reporting limit of  $\leq 0.05 \ \mu g/m^3$  for total PCBs. PCB analysis shall be conducted for PCB homologues and/or PCB congeners.
  - c. In the event that the PCB concentration of any wipe sample is  $> 1 \mu g/100 \text{ cm}^2$ , or if indoor air total PCB concentrations are  $> 0.40 \mu g/m^3$ , UConn shall contact EPA for further discussion and direction on alternatives or other requirements.

- 17. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with CFR 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
  - a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
  - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
  - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.
- 18. Following the completion of the Phase 1 and Phase 2 remediation activities, a monitoring and maintenance plan (MMP) shall be developed which shall include all encapsulated areas addressed during Phases 1 and 2. The MMP shall be prepared as required under Attachment 1, Condition 22 of the November 3, 2017 Phase 1 Approval.

#### **DEED RESTRICTION AND USE CONDITIONS**

- 19. Within sixty (60) days of completing all PCB-related activities associated with the full renovation project (Phases 1 through 3), UConn shall submit for EPA review and approval, a draft deed restriction that shall include: a description of the extent and levels of contamination at the property following abatement; a description of the PCB remedial actions taken at the property; a description of the use restrictions for the property, if applicable; and the long-term monitoring and maintenance requirements, which may be addressed in the monitoring and maintenance plan (MMP, see Condition 18). Within seven (7) business days of receipt of EPA's approval of the draft deed restriction, UConn shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.
- 20. Within ten (10) business days of recording the deed restriction, UConn shall submit to EPA a certification as required under 40 CFR § 761.61(a)(8)(i)(B), that it has recorded the notation on the deed with a copy of the executed deed restriction.

#### SALE, LEASE, OR TRANSFER CONDITIONS

- 21. UConn and any future transferees of the Site will be subject to, and have the benefit of the following in connection with any subsequent sale, lease or transfer of the Site:
  - a. UConn shall notify the EPA of the sale, lease or transfer of any real estate interest in the Site, that has an effect of allocating or sharing any responsibility for complying with the Approval to or with a different person. Such notice shall be in writing no later than 60 days prior to such action. This notification shall include the name, address, and telephone number of the new entity acquiring such an interest in the affected property. In the event that UConn sells, leases or transfers such real estate interest, UConn shall continue to be bound by all the terms and conditions of this Approval, unless EPA approves the allocation of some or all of the Approval's responsibilities to the new owner(s), lessee or transferee. The notification procedures are as follows:
    - The new owner(s), lessee or transferee must request, in writing, that the EPA allocate some or all obligations and responsibilities under the Approval to the new owner(s), lessee or transferee;
    - ii) The EPA reviews the request, and determines whether to allocate some or all of the obligations and responsibilities under the Approval to the new owner(s), lessee, or transferee; and,
    - iii) The new owner(s), lessee or transferee provides written notification to the EPA of its acceptance of and intention to comply with the terms and conditions of the Approval or new approval, should EPA deem a new approval is necessary. The Approval or new approval may be withdrawn if the EPA does not receive written notification from the new owner(s), lessee or transferee of its acceptance of, and intention to comply with, the terms and conditions of the Approval or new approval within 30 days of its receipt of the Approval or the new approval. Under such circumstances, all terms and conditions of this Approval will continue to be binding on UConn.
  - b. In the event that the sale, lease or transfer of a real estate interest in the Site will involve or result in a change in the use of the Site that was not considered under the Approval, EPA may revoke, suspend, and/or modify this Approval or the new approval if it finds, due to the change in use, that the PCB risk-based disposal action will pose an unreasonable risk of injury to health or the environment. UConn or the current Site owner shall record any amendment to the deed restriction, resulting from any approved modification(s), within 60 days of such change(s).

c. In any sale, lease or transfer of a real estate interest in the Site, UConn shall retain sufficient access rights to enable it to continue to meet its obligations under this Approval, except as provided above.

#### INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

- 22. UConn shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by UConn to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
- 23. Any modification(s) in the plan, specifications, and information submitted by UConn, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. UConn shall inform the EPA of any modification, in writing, at least ten (10) days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification.
- 24. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based cleanup and disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from UConn to make a determination regarding potential risk.
- 25. UConn shall record any amendment to the deed restriction, resulting from any approved change or modification(s), within sixty (60) days of such change(s). (See Condition 19).
- 26. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
- 27. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

28. Approval for these activities may be revoked, modified or otherwise altered if: EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; EPA finds that the PCBs remaining at the Site present an unreasonable risk of injury to health or the environment; EPA finds that the institutional and engineered controls are not effective in preventing PCB exposure; EPA finds that there is migration of PCBs from the Site; or EPA finds that changes are necessary to comply with new rules, standards, or guidance for such approvals. UConn may apply for appropriate modifications in the event new rules, standards, or guidance come into effect.

# RECORDKEEPING AND REPORTING CONDITIONS

- 29. UConn shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the decontamination, cleanup and disposal and the analytical sampling shall be established and maintained by UConn in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
- 30. UConn shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMP to be approved by EPA. (See Condition 18).
- 31. As required under Condition 20 of this Approval, UConn shall submit documentation that it has recorded the deed restriction on the property, as applicable.
- 32. UConn shall submit a Final PCB Completion Report (Report) to EPA as a hardcopy and electronic format (e.g., CD-ROM), within 60 days of completion of the Phase 2 activities authorized under this Approval. At a minimum, this Report shall include: a discussion of the project activities, including photo-documentation and Greener Cleanups BMPs, if implemented; characterization and confirmation sampling analytical results (as applicable); copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of and the size of the remediated area(s); copies of manifests and/or bills of lading; copies of certificates of disposal or similar certifications issued by the disposer; and an estimate of the cost of the PCB work completed under this Approval, if known.

33. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator United States Environmental Protection Agency 5 Post Office Square, Suite 100 - (LCRD07-2) Boston, Massachusetts 02109-3912 Telephone: (617) 918-1527

34. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.